

## **ENGINEERING TECHNICIAN**

**General Statement of Duties:** Under general direction of staff engineer: prepares construction drawings, plats, maps and other engineering drawings; uses total station, transit, level, and other survey tools; reviews right-of-way permit requests, issues permits and inspects construction work; receives and answers requests from the public for information regarding public works records, permits, and projects; supports public works information technology (IT) activities including installation, support and maintenance of computer hardware, software and networking applications; maintains asset management system and geographic information system (GIS) for public works infrastructure.

**Distinguishing Features of the Class:** This is a sub-professional engineering position requiring formal technical training. The position requires the ability to work independently in performing assigned technical tasks with limited supervision.

### **Areas of Accountability:**

#### 1. Computer applications.

- Utilizes personal computer for engineering and mapping applications;
- Maintains AUTOCAD plat maps;
- Maintains sanitary sewer, storm sewer and pavement asset management data bases;
- Maintains computer mapping;
- Operates GIS;
- Maintains and operates office computer systems.

#### 2. Permits and inspections.

- Performs plan review of proposed subdivisions, building site plans, driveway and sidewalk construction, sewer connections, street excavation and other construction activities under general direction of an engineer;
- Performs inspection of public works improvement projects and/or construction performed by public utilities and private contractors within the public right-of-way;
- Issues permits for private construction in public right of way;
- Assures compliance with specifications, city codes, and departmental standards;
- Keeps records of plan reviews, permits issued and inspection activities and construction progress;
- Acts as liaison between the department and contractors, utilities, etc.

#### 3. Survey.

- Leads survey party in the performance of various field surveys;
- Operates various surveying equipment;

- Accurately records field survey data including topography, elevations, and boundary lines;
- Performs computations from field notes, and prepares notes for construction surveys.

#### 4. Drafting.

- Drafts various public works projects under the supervision of an engineer using both board and computer aided drafting techniques;
- Plots survey data;
- Prepares construction drawing and plans;
- Prepares as-built drawings of finished projects.

5. As assigned, inspects condition of facilities and operation of activities under the jurisdiction of the Public Works Department.

6. Files and maintains department records relating to the engineering and inspection functions, including maps, subdivision plats, records of public works facilities, permits and records of inspection.

7. Performs additional duties as required.

**Required Knowledge, Skills and Abilities:** Good knowledge of computers, AUTOCAD, ESRI GIS, spreadsheets, databases, mathematics, engineering practice, land surveying, and construction staking, drafting techniques and public works construction techniques and materials. Ability to understand and follow complex oral and written instructions with limited supervision. Physical ability to work out of doors under adverse conditions.

**Acceptable Experience and Training:** Associate degree in Civil Engineering Technology or equivalent formal vocational training required. Experience as engineering technician desirable. Extensive technical experience may be substituted for formal training. Civil Engineering Technology students who have satisfactorily completed at least three semesters of required course work and who will have the Associate's degree before the end of their probationary period will be deemed eligible for consideration.